382-17

BENJAMIN

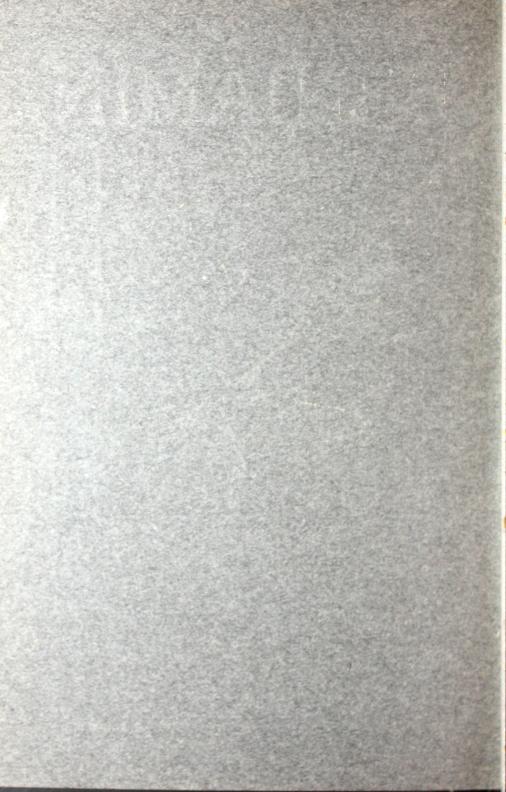
WIRELESS
CLUSTERS
& LIGHTING
SPECIALTIES



CATALOGUE B-15

Benjamin Electric Mfg. Co.

Main Office and Factory, 42 W. Jackson Boulevard, Chicago Eastern Office, 27 Thames Street, New York



BENJAMIN WIRELESS CLUSTERS

DESCRIPTION



HESE clusters consist primarily of an insulating base of porcelain, two one-piece contact plates attached thereto (each serving like terminals of all lamps in the cluster and each provided with a binding screw) and a removable casing of brass or aluminum sup-

ported by porcelain rings or bushings of special design.

In doing away with the necessity of wires in the cluster body, by combining the necessary elements of sockets upon one base, the cost of installation is considerably reduced, both for ceiling and pendant forms, and a neat, strong, durable and well insulated cluster results.

In the series clusters, the contact plates are made in sections, each section (except the two carrying the binding screws) serving two adjacent lamps, the inner and outer plates overlapping each other, thus connecting lamps in series without wiring.

BENJAMIN WIRELESS CLUSTERS,

in their multiple form, have been APPROVED BY THE UNDER-WRITERS' NATIONAL ELECTRIC ASSOCIATION.

Wireless clusters for indoor lighting are required to be fibre lined, except the styles having a switch attached, which requires no lining.

Clusters for outdoor lighting have aluminum shells and copper threaded socket shells, but require no linings.

Other goods shown herein are of the same high standard as the clusters.

These devices are covered broadly by numerous patents.

INSTRUCTIONS

In ordering, use number opposite price, which number indicates to us the number of lights desired as well as style of fixtures.

State whether Edison or T-H base is wanted, where clusters are listed in both bases, otherwise Edison base will be furnished.

State whether multiple or series clusters are wanted where both are listed.

All clusters and cluster fixtures (except weather-proof forms) will be finished in polished brass unless otherwise specified. Extra charge for all other finishes (see page 31).

Weather-proof forms are furnished with aluminum shells unless otherwise specified.

In ordering pendant fixtures, give length from crowfoot to tip of fixtures, otherwise fixture measuring twelve inches will be furnished.

Prices of fixtures do not include stem wires.

Goods are shipped at purchaser's risk, our responsibility ceasing when goods have been received in good order by transportation company.

This cancels all previous quotations.

Prices are subject to change without notice.

Parties unknown to us should remit with order, unless satisfactory references are furnished.

WALL BRACKETS

APPROVED

These wall brackets or angle sockets present a neat appearance and are easily connected.

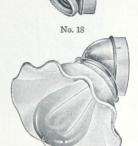
They are made in one and two lights, and are especially adapted for attaching to side walls. Edison base only.

Fibre Lined

No. 18 measures $2\frac{1}{2}$ inches in diameter.

Any shade of suitable size and form may be used with these sockets by using the Benjamin No. 245 2¼-inch shade holder, which is held firmly in position by the insulating socket ring.

Packed 12 in a box.



No. 18-0

No.	18 —1 light,	socket only					\$0 65
No.	18-0-1 light,	with opal shad	e and	l holde	r		95



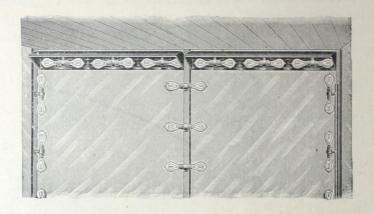
No. 19



No.	19 - 2 light,	socket only	y					\$1	00
No.	19-0-2 light,	with opal	shades	and	hold	ers		1	60
No.	245 -Shade l	nolder							10

Prices are for polished brass finish.

SHOW WINDOW LIGHTING





BENJAMIN No. 4 TWIN SOCKETS

HESE sockets are designed to take two lamps, end to end, both being fed by one set of wires and being as easy to connect as single sockets. A great saving in both time and material is resultant from their use.

These sockets are fibre lined, and are furnished in both polished brass and nickel plated finish.

The ordinary half pear or parabolic reflectors can be used with these sockets, whereby any desired distribution of the light can be obtained.

You should specify these sockets for your window reflectors.

SHOW WINDOW LIGHTING-Continued

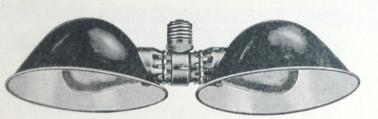
No.	4—Twin So	ocket, polished brass . \$0	65	
		" nickel plated		1
No.	81—Nipple,	3/4-inch, polished brass	10	1
No.	81— ''	3/4 " nickel plated .	12	
No.	194-Flange,	1¼-in. diam., pol. brass	05	
No.	194— "	1¼ " nickel plated	07	
		(50 in box)		



No.







Something New

BENJAMIN TWIN SOCKET PLUG

(25 in box)

Fits any Edison base socket. Turns at any angle. Takes any standard shades. Shades can be rotated to any desired position.

If your show window is wired with individual sockets use this device and throw the light where it will show the goods to advantage.

Without

With Frosted Alum. Shades

No. 942-

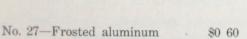
\$1 00

\$2 20

Parabolic Shades for above. Will fit any standard socket.



No. 942

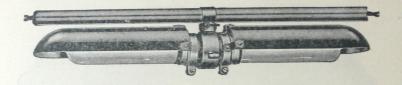




No. 27

SHOW CASE LIGHTING

Benjamin Twin Sockets are simple, compact and durable—in short, the most suitable device known for show case work.



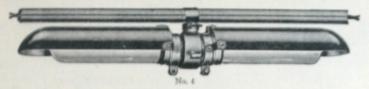
The above cut shows the No. 4 Socket attached to a brass tube by means of a special clamp. No nipple is required, thus leaving an extra large opening through which wires can be be looped and connections made without taps.



This cut illustrates the No. 4 Socket with a special adjustable fitting so constructed as to fit wall, moulding or the rail on inside of a show case. The fitting permits socket to be placed in any desired position.

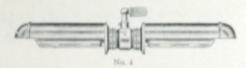
\$0 35

SHOW CASE LIGHTING-Continued



Socket with Clamp. Wires can be looped into socket.

					Pol. Brass	Nie Pla	ted
No. 4—Socket only					\$0 65	\$0	70
No. 4-Clamp only					25		30
No. 4—Socket with	clamp	and	shades			2	60



Socket with Hinge Support.

	Pol. Brass	Nickel Plated
No. 4—Hinge support	\$0 25	\$0.30
No. 4 Socket complete with shades and hinge	support .	2 60
No. 4 Sockets are fibre lined and	approved.	



No. 21—Nickel-plated half shade	. \$0.80
No. 21% — Nickel-plated half shade	. \$0.80



Pol. Brass No. 353-54-inch brass tubing, per foot Extra for drilling wire openings, 5c each list. Sockets put up 50 in box.

BENJAMIN WIRELESS CLUSTERS

CEILING FORMS

APPROVED - FIBRE LINED

These clusters are made in three sizes as follows:

No. 8-21/2-inch diameter, 2 light only, Edison base only.

No. 2 - 32, 3 and 4 light, Edison base only.

No. 1-42 to 6 light, Edison and T.-H. base.

No. 7 is same as No. 1 with switch added, Edison base only.

These clusters are adapted for stems by adding fittings listed with same. Clusters attach to ceiling with screws same as a wall socket.

The metallic shades shown on page 26 are made to fit on back of cluster and require no shade holders.



Style No. 8 is made in 2 light Edison base multtiple only, and measure 2½ inches in diameter.

> With No. 38 Flange attached

No. 82-2 light Mult. (12 in box) \$1 00 \$1 10



Back fitting for above, with screws attached:

No. 38 Flange, tapped for 3/8 inch iron pipe No. 8 Flange, tapped for ½ inch iron pipe 15

Style No. 2 measures 3 inches in diameter, and is made in Edison base only. Put up 12 in box.



No. 2

				Flange atta	
No. 22 -2 light Mul	t	\$1	25	\$1	35
No. 22½-2 light Seri	ies .	1 3	30	1	40
No. 23 -3 light Mul	t	1 8	50	1	60
No. 23½-3 light Seri	ies .	1 (60	1	70
No. 24 -4 light Mul	lt	1 '	75	1	85



Back fittings for above, with screws attached:



No. 2F

No. 32 Flange, tapped for 3/8 inch iron pipe \$0 10 15 No. 2 Flange, tapped for ½ inch iron pipe

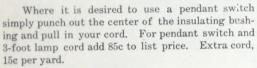
For Reflectors see page 26

CEILING FORMS-Continued

APPROVED-FIBRE LINED

Style No. 1 cluster is four inches in diameter and is made in both Edison and T-H base.

	(Six	in	box)	1	With No. 31 Flange Attached
No. 12 -2 light	Mult.			\$1	50	\$1 65
No. 12½-2 "	Series			1	55	1 70
No. 13 -3 "						
No. 13½-3 "	Series			1	85	2 00
No. 14 -4 "	Mult.				00	2 15
No. 14½-4 "	Series			2	10	2 25
No. 15 -5 "	Mult.				25	2 40
No. 15½-5 "	Series			2	35	2 50
No. 16 -6 "					50	2 65



Five amp. pendant switch . . . \$0 70

Style K is like No. 1, with one light straight down. Approved—fibre lined.

	(S	ix	in	box) .	With No. 31 Flange Attached		
No. 13-K-3 light					\$1	80	\$1 95	
No. 14-K-4 "					2	05	2 20	
No. 15-K-5 "					2	30	2 45	
No. 16-K-6 "					2	55	2 70	

Style No. 7 is the same as No. 1. with indicating switch added. Recently improved. Edison base only. Approved. Requires no fibre lining.

	(S	ix ir	n b	ox)	With No. 31 Flange Attached			
No. 72-2	light	Mult.				\$2	50	\$2 65	
No. 73-3	"	"				2	75	2 90	
No. 74-4	4.6	"				. 3	00	3 15	
No. 75-5	44	"				3	25	3 40	
No. 76-6	"	"				3	50	3 65	

Back fittings for styles Nos. 1, K and 7.

No.	31-F	Plange,	tapped	for	3/8-in	nch pipe		\$0	15
	1-			"		"			20
No.	1-	44	"	"	3/4	"			20

For Pendant Forms see pages 14 to 17.



Jo 1





Style K





No. 31



No. 1-F

CEILING FORMS-Continued

APPROVED



Cluster with ceiling flange.

No.	222 - 2	light	Mult.				\$1 75
No.	$222\frac{1}{2}-2$	"	Series				1 80
No.	223 -3	"	Mult.				2 00
No.	$223\frac{1}{2}-3$	"	Series				2 10
No.	224 - 4	"	Mult.				2 25

Cluster with metal sub-base for supporting opal shades close to ceiling. Shade is supported between rubber rings.



No. 322

					Less Shade	With 14-inch Opal Shade	With 16-inch Opal Shade
No. 322—2 1	ight	Mult.			\$1 95	\$2 55	\$2 95
No. 323-3	. 66	"			2 20	2 80	3 20
No. 324-4	"	"			2 45	3 05	3 45
No. 315-5	"	"			2 95	3 55	3 95
No. 316-6	"	"			3 20	3 80	4 20



With Indicating Switch Attached.

No. 372-21	light	Mult.			Shade \$3 20	With 14-inch Opal Shade \$3 80	With 16-inch Opal Shade \$4 20
No. 373-3	"	"			3 45	4 05	4 45
No. 374-4		"			3 70	4 30	4 70
No. 375-5	"	"			3 95	4 55	4 95
No. 376-6	"	"			4 20	4 80	5 20

CEILING FORMS WITH INDIVIDUAL SHADES

MADE IN EDISON BASE ONLY.
APPROVED.

These clusters are same as those shown on pages 8 and 9, with No. 245 shade holders made specially for the purpose, and opal shades.

Any shades of suitable form may be used.

(Clusters packed 12 in box)



N		

With fitting for

								stem attached
No. 82-0-2	light	Mult.	with	opal	shades		\$1 60	\$1 70
No. 22-0-2	,66	"	46	"	"		2 15	2 25
No. 23-O-3	- 166	- "	"	"	"		2.70	2 80
No. 24-0-4		"					3 25	3 35
No. 12-0-2	. 66	66	. "				2 10	2 25
No. 13-0-3	66	- 66	""	"	- "		 2 65	2 80
No. 14-0-4	"	"		"	- 44		3 20	3 35
No. 15-0-5		"					3 75	3 90
No. 16-0-6	- 66	"	"	"	. 44	 	 4 30	4 45

Style KO consists of a style K cluster with opal shades for each lamp, and is very attractive.

The distribution of light is excellent.

(6 in box)



No. 16-KO

									stem attached
No. 13-KO-3	light	Mult.	with	opal	shades		\$2	70	\$2 85
No. 14-KO-4	- 66	- 66	66		- 66		3		3 40
No. 15-KO-5	6.66	"	- 66	- "	166	 	3	80	3 95
No. 16-KO-6	. 66	- 66	166	"	"		4	35	4 50
							1		
							-		-

Style No. 7 cluster with opal shades, indicating snap switch at center of cluster.

(6 in box)

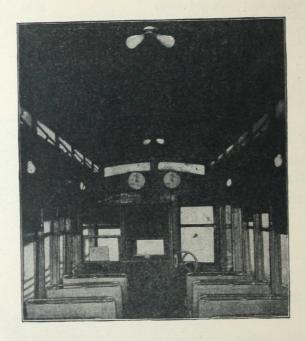


No. 75-0

25
20
80
35
90
45

BENJAMIN WIRELESS CAR CLUSTERS

As they appear in service



An interior view of a St. Louis Transit Company's Car equipped with Benjamin Car Clusters

The above named company is using several thousand of these clusters in its cars

CAR CLUSTERS

STYLE No. 2

EDISON BASE ONLY.

Measures three inches in diameter and attaches directly to ceiling of car by means of wood screws.



Style No. 2

No. 22½-2	light	series	(12 in	box)				\$1 3	30
No. $23\frac{1}{2} - 3$	6.6	"	"	66				1 6	60

STYLE No. 1

EDISON AND T.-H. BASE.

Measures four inches in diameter and is adapted to be held to ceiling by three wood screws.



Style No. 1

No. 121/2	-2 li	ght s	series	(6 in	box)					\$1 55
No. 131/2	-3	"	44	"	"					1 85
No. 141/2	-4	"	""	"	"			-		2 10
No. 151/2	-5	"	"	"	"					2 35



CLUSTER WITH METAL SUB-BASE

WITH RUBBER RINGS FOR HOLDING SHADE FIRMLY.

					With Sub-base	With Opal		With Opal	16-in. Shade
No. 322½-2	light	series	(12 in	box)	\$2 00	\$2	60	\$3	00
No. 323½-3		"	"	"	2 30	2	90	3	30
No. 314½-4		"	(6 in	box)	2 80	3	40	3	80
No. 315½-5	"	. "	"	"	3 05	3	65	4	05

EXTRA CHARGE FOR DIVIDED CIRCUITS.

CLUSTER FIXTURES

APPROVED



These pendant clusters are made up from the ceiling forms shown on pages 8 and 9, and consist of cluster body, back fitting, stem, crow-foot and canopy. Shade holders are furnished where Opal or X-Ray shades are specified. The other shades listed do not require shade holders.

Standard length is 12 inches over all.

Extra length stem, 30 cents per foot.

These fixtures are shipped knocked down.

Prices are for polished brass finish.

Style No. 8 body, 2½ inches in diameter. Edison base only.

No Shade or Holder Tin Mirror Aluminum Shade and Holder Opal X-Ray

Mult. \$1 70 \$2 10 \$2 80 \$2 90 \$2 40 \$3 60

No. 882-2 light Mult.

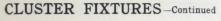


When insulating joints are called for, a 4 inch by 4 inch canopy is furnished instead of canopy shown. for this change (including 3% by 3% inch insulating joint) add 75 cents to list price.

Style No. 2 body, 3 inches in diameter. Edison base only.

No. 824		No Sha	ade	_	1	4-inch	Sha	ide-		Sha		d Hol	der
		or Hole		T	in	Mir			inum	O	pal	X-I	lay
No. 822 -2 ligh	t Mult.	\$1 9	5	\$2	45	\$3	30	\$3	35	\$2	85	\$4	25
No. 8221/2-2 "	Series	20	00	2	50	3	35	3	40	2	90	4	30
No. 823 -3 "	Mult.	2 2	20	2	70	3	55	3	60	3	10	4	50
No. 8231/2-3 "	Series	23	30	2	80	3	65	3	70	3	20	4	60
No. 824 -4 "	Mult.	2 4	45	2	95	3	80	3	85	3	35	4	75

For Reflectors see page 26. For Fixture Parts see pages 28 and 29.



APPROVED

Notice that the porcelain cluster base forms an insulating partition between stem and cluster body.

Style No. 1 body, 4 inches in diameter. Edison or T-H base.



No.	

No.	812	-2	light	Mult.
No.	8123	$\frac{1}{2}$	66	Series
No.	813	-3	"	Mult.
No.	8131	6 - 3	66	Series
No.	814	-4	66	Mult.
No.	8141	6-4	"	Series
	815		66	Mult.
No.	8151	6 - 5	"	Series
No.	816	-6	"	Mult.

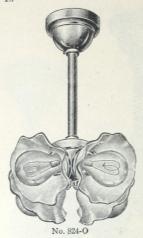
		210102	14-inch			
No Shade		4-inch Shad			d Holder	
or Holder	Tin	Mirror	Alum.	Opal	X Ray	
\$2 25	\$2 75	\$3 60	\$3 65	\$3 15	\$4 55	
2 30	2 80	3 65	3 70	3 20	4 60	
2 50	3 00	3 85	3 90	3 40	4 80	
2 60	3 10	3 95	4 00	3 50	4 90	
2 75	3 25	4 10	4 15	3 65	5 05	
2 85	3 35	4 20	4 25	3 75	5 15	
3 00	3 50	4 35	4 40	3 90	5 30	
3 10	3 60	4 45	4 50	4 00	5 40	
3 25	3 75	4 60	4 65	4 15	5 55	

It is cheaper to use a cluster with a switch attached than to run wires to a switch on the wall.

Style No. 7 body, 4 inches in diameter. Edison base only. Recently improved.

III"
No. 873

					10.010		nch
		No Shade	1	4-inch Shad	e	Shade an	d Holder
		or Holder	Tin	Mirror	Alum,	Opal	X-Ray
No. 872-2 light	Mult.	\$3 25	\$3 75	\$4 60	\$4 65	\$4 15	\$5 55
No. 873-3 "	"	3 50	4 00	4 85	4 90	4 40	5 80
No. 874-4 "	"	3 75	4 25	5 10	5 15	4 65	6 05
No. 875-5 "	"	4 00	4 50	5 35	5 40	4 90	6 30
No. 876-6 "	"	4 25	4 75	5 69	5 65	5 15	6 55



CLUSTER FIXTURES-Continued

APPROVED

These clusters are listed with opal shades, but any shades of suitable form and size can be used.

Special 2½-inch shade holders are provided, which fit Benjamin clusters only.

Prices include stem, shade-holders, shades, canopy and crowfoot.

With No. 8 Body, 21/2-inch diameter.

No. 882-0-2 light Mult. with opal shades . \$2 30

With No. 2 Body, 3-inch diameter.

No.	822-0-2	light	Mult.	with	opal	shades	2	55
No.	823 - 0 - 3	"	"	"		"	3	10
No.	824 - 0 - 4	"	"	-66	"	"	3	65

With No. 1 Body, 4-inch diameter.

No.	812-0 - 2	light	Mult.	with	opal	shades	2	85
No.	813-0-3	"	"	"	"	"	3	40
No.	814-0-4	"	"	"	"	"	3	95
No.	815-0-5	"	"	"	"	"	4	50

Style KO is very effective in both appearance and distribution of light.



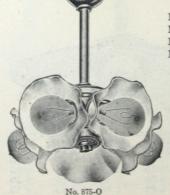
No. 816-KO

No.	813-KO	-3	light	Mult.	with	opal	shades	\$3	45	
No.	814-KO	-4	"	"	"	"	"	4	00	
No.	815-KO	- 5	**	"	"	"	"	4	55	
No.	816-KO	- 6	"	"	"	"	"	5	10	

Cluster Fixture with Indicating Switch attached.

No.	872-0	-2	light	Mult.	with	opal	shades	\$3	85
No.	873-0	-3	"	"	"	"	"	4	40
No.	874-0	-4	"	"	"	"	"	4	95
No.	875-0	-5	- 66	"	"	"		5	50

For Shades see page 26



CLUSTERS

For Lighting Churches, Halls and Public Buildings

These Clusters are composed of a metal shell of neat design with openings in



Style "A"

which are located porcelain lamp receptacles of special design. The receptacles are easily connected by means of binding screws inside of body. Any reflectors of suitable size can be used. Clusters are provided with 12-inch stems, crowfeet and canopies.

Style "A" takes a 5-8 inch Brass stem. Style "B" takes a 1-2 inch Iron pipe and 1 inch Brass casing.

MADE IN EDISON BASE ONLY.

	Cluster Body Only.	Complete No Reflector.	Complete with 24 in. Plain Mir. Refl.	24 inch Border Edge Mir. Refl.
No. 608A - 8 light,	\$5 00	\$5 65	\$10 15	\$13 65
No. 610A-10 light,	5 60	5 25	10 75	14 25
No. 612A-12 light,	6 20	6 85	11 35	14 85

Finished in Polished Brass. Extra charge for Special Finish. For Aluminum Body instead of Brass, add 25c to List Price. Extra Length Stem add 30c per foot to List Price.



Style "B"

MADE	IN	EDISON	BASE	ONLY

	MADE IN	Complete with			
		Tuster dy Only.	Complete No.Reflector.	Complete with 30 in. Plain Mir. Refl.	30 inch Border Edge Mir. Refl.
No CIED 15 light	15 and 0, \$	8 00	\$8 95	\$16 15	\$19 95
No. 615B—15 light,	12 and 4.	8 40	9 35	16 55	20 35
No. 616B-16 light,		00 00	10 95	18 15	21 95

Finished in Polished Brass. Extra Charge for Special Finish. For Aluminum Body instead of Brass, add 25c to list price. Extra Length Stem, add 45c per foot to list price.

WEATHERPROOF CLUSTERS

APPROVED

This type of cluster is specially suited for out door lighting and for mines, subways, etc., wherever the atmospheric conditions are detrimental to the ordinary type or form of cluster. The socket-shells are of copper, the casings of



polished aluminum, and the cluster-back sealed by a flange tapped for ½-in. pipe and screwed directly on end of support, thus insuring security against ordinary forms of annoyances so prevalent to this class of work. The shades are heavy, well calculated to withstand hard usage and tapped for ½-inch pipe only.

	No Pip	e or Nipp	ple is i	No. 40 included		15-inch White and Green	15-inch Porcelain	20-inch Porcelain
No.	F	lange and	d Shad	le		Enameled Painted IRON	Enameled STEEL	Enameled
42 - 2	light	Mult.,	No.	2 body		\$2 75	\$3 80	\$4 60
$42\frac{1}{2} - 2$	**	Series	"	2 "		2 80	3 85	4 65
43 -3	"	Mult.	"	2 "		3 00	4 05	4 85
$43\frac{1}{2} - 3$		Series	"	2 "	,	3 10	4 15	4 95
44 - 4	"	Mult.	"	2 "		3 25	4 30	5 10
441/2-4		Series	"	1 "	,	3 60	4 65	5 45
45 -5		Mult.	**	1 "		3 75	4 80	5 60
$45\frac{1}{2} - 5$	"	Series	**	1 "		3 85	4 90	5 70
46 - 6	4.6	Mult.	"	1 "		4 00	5 05	5 85



No. With Goose Neck, Fittings and Shade	No. 50 15-inch White and Green Enameled Painted IRON	15-inch Porcelain Enameled STEEL	20-inch Porcelain Enameled STEEL
52 —2 light Mult., No. 2 body	. \$3 65	\$4 70	85 50
52½-2 " Series " 2 "	3 70	4 75	5 55
53 -3 " Mult. " 2 "	3 90	4 95	5 75
531/4-3 " Series " 2 "	4 00	5 05	5 85
54 -4 " Mult. " 2 "	4 15	5 20	6 00
541%-4 " Series " 1 "	4 50	5 55	6 35
55 -5 " Mult. " 1 "	4 65	5 70	
55½-5 " Series " 1 "	4 75		6 50
56 —6 " Mult. " 1 "		5 80	6 60
	4 90	5 95	6 75
Weatherproof Shades only	1 50	2 40	3 20

WEATHERPROOF CLUSTERS

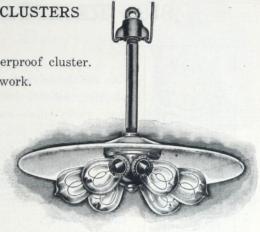
-Continued

Another form of weatherproof cluster.

Designed for supension work.

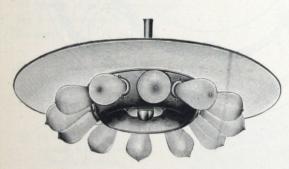
It is of the same high class construction used in our other forms.

These clusters are not required to be fibre lined for out-door lighting.



No. 60

No. N	lipple	, Fittings	and S	Shade			White & Green Cham. Painted IRON	Porcelain Enameled STEEL	Porcelain Enameled STEEL
62 - 21	ight	Mult., 1	Vo. 2	body			\$3 25	\$4 30	\$5 10
$62\frac{1}{2}-2$		Series,					3 30	4 35	5 15
63 -3	"	Mult.,	"	2 "			3 50	4 55	5 35
$63\frac{1}{2} - 3$	"	Series,	56 2	2 "	~.		3 60	4 65	5 45
64 - 4	"	Mult.,	" 5	-			3 75	4 90	5 65
$64\frac{1}{2}-4$	"	Series,	"]	"			4 10	5 20	6 00
65 -5	"	Mult.,	"				4 25	5 35	6 15
$65\frac{1}{2} - 5$		Delles,	" 1	"			4 35	5 45	6 25
66 -6	"	Mult.,	"]	"			4 50	5 60	6 40



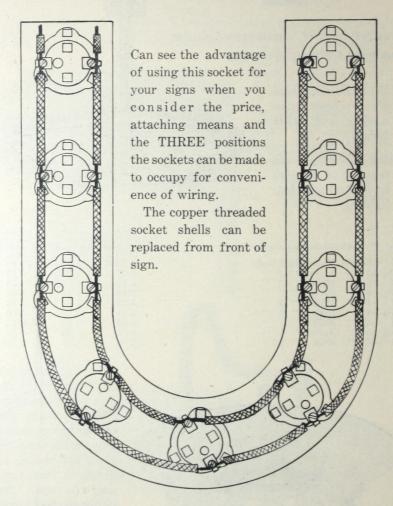
No. 612

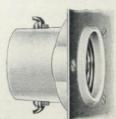
The cut shows our No. 612 with the 20-inch porcelain enameled steel shade. The cluster has an aluminum casing with the No. 6 receptacles so arranged that they may be used for either parallel (multiple) or series work.

Easily wired.

No.				Body only	Style 40	Style 50	Style 60
608-W. P 8	light			\$ 5 00	\$ 8 20	\$ 9 10	\$ 8 70
610-W. P10				5 60	8 80	9 70	9 30
612-W. P12	"			6 20	9 40	10 30	9 90
615-W. P15				8 00	11 20	12 10	11 70
616-W. P16	"	(12 and	4)	8 40	11 60	12 50	12 10
620-W. P20	"	(15 and	5)	10 00	13 20	14 10	13 70

SIGN RECEPTACLES





Sockets with Bolts Attached.

Put up 25 in Box.

Edison Base only.

\$0 25

No. 6-S

BENCO

The All-Weather Socket. Recently improved.

Consists of a One-Piece Porcelain Receptacle and a One-Piece shell of aluminum or brass, with opening tapped for ½-inch or ¾-inch iron pipe or conduit.

Wires can be looped in.

Binding screws are accessible from the front.

Used for street railway circuits (indoor and out), street lighting, in mines, factories, engine and boiler rooms, and in numerous places where wires are run in conduit and where unfavorable atmospheric conditions prevail.

			½-inch	3%-inch
No.	420—With aluminum shell		\$0 60	\$0 60
No.	421-With brass shell .		60	60
	Packed 25 in a	box		





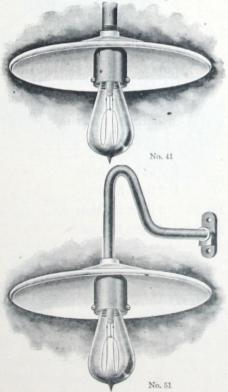
Benco with Porcelain Enameled Steel Shade.

These are the best combinations of weather-proof socket and reflector on the market, both reflector and socket being tapped for ½-inch pipe, and each forming a weather-proof joint with the pipe.

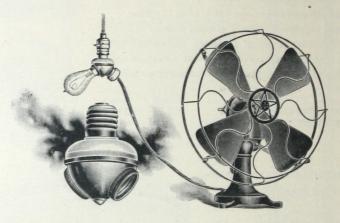
No.	41-Sock	ket w	rith 1	0-inc	ch	
	shade				\$1	80
No.	41½-So	cketv	vith 1	5-in	ch	
	shade				\$3	00

No. 51—Pole fittings, std. goose neck, shade and Benco, as shown.

With 10-inch shade	\$2 70
With 15-inch shade	3 90
10-inch shade only	1 20
15-inch shade only	2 40



BENJAMIN WIRELESS RECEPTACLE PLUG



Fits any Edison base socket; receives any combination of lamps and attachment plugs. By its use a one light pendant can be converted into a cluster. You will need one of these when you connect your fan. Packed 12 in a box.

No 02	2 light Multiple 2 light Series				\$1 00
No. 92	2 light Series				1 10
No. 93	3 light Multiple				1 30
No. 94	4 light Multiple				1 60



WALL BRACKETS

With crowfoot and canopy.
Polished brass finish, not wired.



BI	-	171
TA	O.	TIL

No. 171-1 light	bracket	only					\$1	20
No. 172-1 light	bracket	with	keyless	socke	t		1	50
No. 173-1 light	bracket	with	key soch	ket			1	55

Two light bracket, Not wired.



No.	174-2 light	bracket	only					\$2	00
No.	175-2 light	bracket	with	keyless	socke	t		2	60
No.	176-2 light	bracket	with	key soc	ket.			2	70

TWO LIGHT PORTABLE

Consists of a twin socket plug, removably attached to a one light portable with key socket.

The twin socket can be rotated to any desired position, and the shades are removable and can be adjusted to any desired position around lamps, so as to throw light from each lamp in different directions.

No. 942—Twin socket plug only			\$1	00
No. 943—Portable, complete, except shades			3	40
No. 944-Portable, complete, with aluminum	shade	S	4	60

DROP LIGHT SOCKETS

These sockets are designed for convenience of installation; the binding screws being located on the back side of the socket base. The cap is fiber lined, formed with a neck also fiber lined, with large opening to receive the lamp cord and sufficient space in cap to admit of a large knot being tied in cord. No threaded metal bushing in cap and therefore not necessary to use a composition bushing to insulate cord from shell. It is not necessary to remove lower shell in order to connect wires.

These sockets are intended for drop lights and you save cost of insulating bushing as well as labor in installing goods.



No. 430 is especially desirable for street railway circuits, owing to the form and size of opening in cap. Edison base only. Packed 50 in a box; 250 in a standard package.

No. 430—Keyless Sockets · · · · 30c each



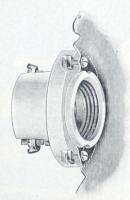
No. 431 is a key socket similar in design to No. 430.

No. 431 packed 50 in box; 250 in a standard package; key socket 33c each

BENJAMIN RECEPTACLES No. 6

Intended to be attached to Sheet Metal Surfaces (flat or curved) by means of bolts.

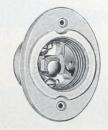
Just the thing for trough reflectors and metal ceilings, and is well adapted for special fixtures such as Spheres, Hemispheres and special forms of spun metal work. This Receptacle is used in the larger types of Benjamin Clusters. Put up 25 in a box with bolts attached.



No 6

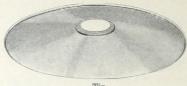
No. 6A is same as No. 6, except that terminals are located in the lamp opening, the wires can be looped into socket.

No. 6A—Receptacle · · · · · · 25c



No. 6A

REFLECTORS



Tin

METAL REFLECTORS

Designed to fit on back of Benjamin Clusters and require no shade holders. No. 1 Reflector fits style No. 1 Cluster, (4-inch base.) No. 2 Reflector fits style No. 2 Cluster,

(3-inch base.) No. 8 Reflector fits style No. 8 Cluster, $(2\frac{1}{2}$ -inch base,)

TIN REFLECTORS



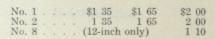
Mirror

Aluminum

Opal

		E	na	m	ele	d w	hite	e and	gree	en.	
						14-	in.	16-	in.	18-in.	
No.	1					\$0	50	\$0	60	\$0 75	
No.	2						50		.60	75	
No.	8				(1	2-in	nch	only)		40	

MIRROR REFLECTORS



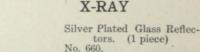
POLISHED ALUMINUM

No.	1			\$1 40	\$1 70		
No.	2			1 40	1 70		
No.	8			(12-inch	only)	\$1	20

OPAL REFLECTORS



X-RAY



No. 660,		
2	14-inch Holder	
	12-in.	
	\$1 70	
9	14-inch Holder	
14-in.	16-in.	18-in.
\$2.00	\$2.30	\$2 60





OPAL SHADES 21/4 x5 inches. Takes No. 245 Shadeholder.

SHADE HOLDERS

POLISHED BRASS FINISH

No. 243 is a regular 2¼-inch socket shade holder \$0.10

No. 245 is made to fit Benjamin wireless clusters only, and is held in position by the insulating socket ring.

No. 245-24-inch, . . \$0 10

No. 247 is intended to slip a stem and is made with both %s-inch and ¾-inch slip.

No. 247 —2¼-in., 5%-in. slip \$0 20 No. 247½—2¼-in., 34-in. slip 20

No. 248 is a two-piece holder and is made in both 5%-inch and 34-inch slip.

No. 248 —3¼-in., 5%-in. slip \$0 30 No. 248½—3¼-in., 34-in. slip 30

No. 249 is made in both 5%-inch and 34-inch slip.

No. 249 —3¼-in., 5%-in. slip \$0 30 No. 249½—3¼-in., 34-in. slip 30



Regular Socket Holder No. 243



No. 245



No. 247





No. 248



No. 249

FIXTURE PARTS-Continued

POLISHED BRASS



No. 353

FIXTURE STEMS



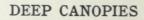
STANDARD CANOPY

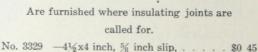
4½ x2½ inches.

This canopy will cover when iron hickey or crowfoot is used.

No. 3174 — %-inch slip \$0 25

No. 3174½ — ¼-inch slip, 25







FLANGES

This flange can be used with Cluster when back fitting is attached as shown top of page 10.



This flange is used for the No. 4 Socket and is tapped for \(\frac{1}{8}\)-inch iron pipe.

No. 194-114 inch flange, tapped $\frac{1}{8}$ inch \$0 05



NIPPLE

FIXTURE PARTS

IRON

All cluster fixtures are supplied with crowfeet unless otherwise specified. Crowfoot is tapped for 3%-inch iron pipe and takes 5%-inch brass stem.

No. 195	No. 195	1					15.	\$0 0)5
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Iron hickeys are often used with Benjamin clusters instead of insulating joints, the porcelain base of cluster serving the purpose.

No.	1455 −3/8 x 3/8-inch		\$0	15
No	1455 1/2 - 1/2 x 3/8-inch	W.		20

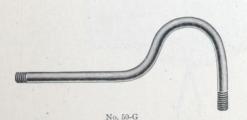


Malleable iron insulating joint.

No. 1043 —3/8 x 3/8-inch			\$0	60
No. 1043 1/2 — 1/2 x 3/8-inch				80
Suspension fitting No. 60-S				25
Nipple for above (½x8-in.)	No.	60-N		25



No. 1043





No. 60-S

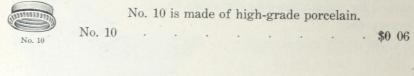
Goose neck, made from three feet of ½-inch iron pipe.

No.	50-G-Painted black	\$0	60	
No	50-P-Pole fitting for above		30	



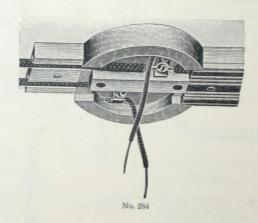
SOCKET RINGS

These rings are made especially for Benjamin clusters and receptacle plugs. They are made heavy enough to stand ordinary usage.



PORCELAIN SUB-BASE

Can be used for either moulding or open wiring. This base measures three inches in diameter and takes style No. 2 cluster in 2, 3 and 4 lights. The leads attach directly to binding screws.



SPECIAL FINISHES

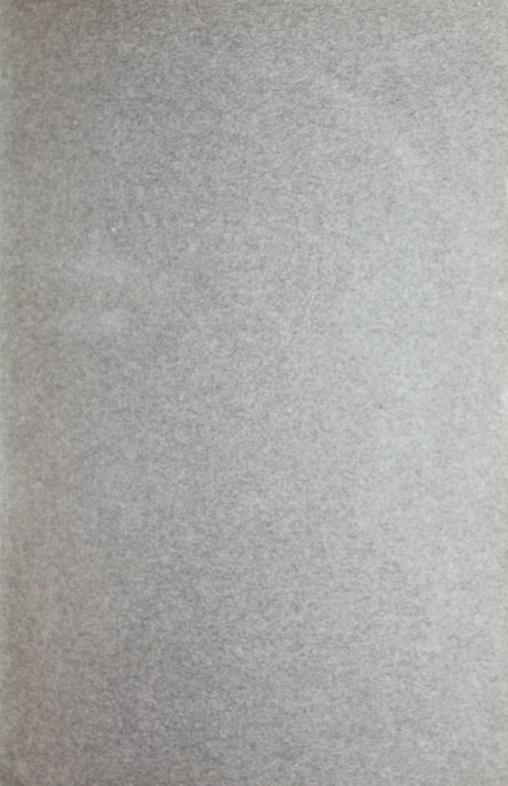
In placing orders for goods with other than standard finish (polished brass), it is desirable that you send, where possible, a sample of the finish wanted.

Old brass	4- 4	add	5%	to list.
Gilt		"	5%	"
Mottled copper			10%	
Oxidized copper		"	10%	
Wrought iron		"	10%	"

Other finishes quoted on application.



PHOTOGRAPH OF EXHIBIT AT LOUISIANA PURCHASE EXPOSITION HELD AT ST. LOUIS, MO., U. S. A., 1904



BENJAMIN WIRELESS CLUSTERS AND LIGHTING SPECIALTIES

